

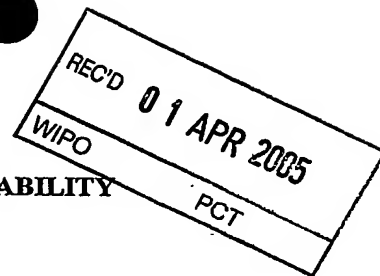
Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference 03PCT378-WDZ		FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/CN03/00926	International filing date (day/month/year) 31. October 2003 (31.10.03)	Priority date (day/month/year) 05. November 2002(05.11.02)	
International Patent Classification (IPC) or national classification and IPC IPC <sup>7</sup> B25B 13/24,13/08, 13/58			
Applicant LU, Hong			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input checked="" type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 02.Jun 2004 (02.06.04)		Date of completion of this report 08.Mar 2005 (08.03.05)	
Name and mailing address of the IPEA/ CN		Authorized officer Zhang Liqun	
Facsimile No.		Telephone No. 86-10-62085461	

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:

- ☐ international search (under Rules 12.3 and 23.1(b))  
☐ publication of the international application (under Rule 12.4)  
☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☒ the international application as originally filed/furnished

☐ the description:

pages \_\_\_\_\_ as originally filed/furnished  
pages \* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
pages \* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ the claims:

pages \_\_\_\_\_ as originally filed/furnished  
pages \* \_\_\_\_\_ as amended (together with any statement) under Article 19  
pages \* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
pages \* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ the drawings:

pages \_\_\_\_\_ as originally filed/furnished  
pages \* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
pages \* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_  
☐ the claims, Nos. \_\_\_\_\_  
☐ the drawings, sheets/figs \_\_\_\_\_  
☐ the sequence listing (*specify*): \_\_\_\_\_  
☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_  
☐ the claims, Nos. \_\_\_\_\_  
☐ the drawings, sheets/figs \_\_\_\_\_  
☐ the sequence listing (*specify*): \_\_\_\_\_  
☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement:**

Novelty (N)	Claims <u>2-10</u>	YES
	Claims <u>1</u>	NO
Inventive step (IS)	Claims <u>3,5,6,8,9</u>	YES
	Claims <u>1,2,4,7,10</u>	NO
Industrial applicability (IA)	Claims <u>1-10</u>	YES
	Claims <u>None</u>	NO

**2. Citations and explanations (Rule 70.7)**

Document cited in the International Search Report:

D1:US4,706,528; D2: CN1025300C.

The closest prior art is represented by document cited US4,706,528 (D1) . Said D1 disclosed a single wedge-type wrench (see Fig 8, lines 53 of Column 3 - lines 4 of Column 4), which includes two jaws (10,26), the clamping surface of one (26) of them being zigzag (38). In addition, said wrench includes a wedge (16) provided with a zigzag clamping surface (18). Said wedge (16) is mounted on the inner surface of the other one (10) of said two jaws (10,26) by means of a connection member (24), which can slide along said inner surface. As noted above, the Document 1 has disclosed all of the technical features which claim 1 requests. Therefore, claim 1 doesn't satisfy the criteria set forth in PCT Art. 33(2), hence involving no novelty.

Said D2 disclosed that there is provided a kind of M-C wedge type spanner, both claws or one claw have a wedge device comprised of spring, locating pin or screw, pressing sheet and cylindrical wedge, the axis of the wedge makes an angle of 10-35 degree with the claws. On the slant face of the wedge there are 1-6 working teeth which can match the corners of a nut to form selflock condition of working teeth face; the spanner is capable to enlarge its using range and to screw a blunt nut with the aid of the toothed wedge which can expand and contract.

Said dependent claims 2,4,7,10 further define the claim they refer to. The additional technical features of said dependent claims are disclosed in said D1 and D2(see Abstract and Fig 1), too. Therefore, it is obvious for skilled persons in the art, to combine the Document 2 on the basis of the Document 1, so as to achieve the art scheme claimed in the claims. Moreover, in the condition that the claim 1 they refer to does not possess novelty, claims 2,4,7,10 don't satisfy the criteria set forth in PCT Art. 33(3), hence involving no inventiveness.

Because the subject matter of claims 1-10 involves industrial applicability, claims 1-10 meet the requirements of PCT Art. 33(4), indeed.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/CN03/00926

Box No. VI Certain documents cited

1. Certain published documents (Rule 70.10)

Application No. Patent No.	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
US4706528A	17-11-87	21-10-86	None
CN1025300C	06-07-94	17-07-92	None

2. Non-written disclosures (Rule 70.9)

Kind of non-written disclosure	Date of non-written disclosure (day/month/year)	Date of written disclosure referring to non-written disclosure (day/month/year)

VIII-3-1	<p><b>声明：有权要求优先权</b></p> <p>关于申请人在国际申请日有权要求下面指明的在先申请优先权的声明，如果该申请人不是在先申请的申请人或在提交在先申请后，申请人的姓名进行了变更。(4.17(iii)和51之二.1(a)(iii))：</p> <p>名称：</p>	<p>关于本 国际申请</p> <p>鲁 宏</p> <p>基于下列事项，有权要求申请号为<b>022706 76.3</b>的在先申请的优先权：</p>
VIII-3-1 (i)		申请人是通过在先申请寻求保护的主题的发明人
VIII-3-1 (ix)	本声明是对：	所有指定国